

King Edward's Hospital Fund for London



NURSING STAFF

CONSIDERATIONS

ON

STANDARDS OF STAFFING

Published for King Edward's Hospital Fund for London by
GEO. BARBER & SON, LTD., FURNIVAL STREET, LONDON, E.C.4.

Price 6d. net, post free.



22503471695

King Edward's Hospital Fund for London

NURSING STAFF

CONSIDERATIONS ON STANDARDS OF STAFFING

	CONTENTS	Page
<i>Section A</i>	Introduction.	3
B	The case for a review of standards of staffing.	4
C	Some factors to be taken into account in assessing staff requirements.	7
D	Considerations on the ratio of ward staff to in-patients.	9
E	Relationship between numbers of ward staff and other nursing staff.	15
F	Is any useful purpose served by aiming at an optimum ratio in the present circumstances?	16
G	Hours of duty, span of duty, and fixed off-duty time.	18
H	Accommodation for nurses.	19
I	Conclusions.	21
Appendix	Methods of calculating hours of duty and samples of charts for use in arranging duty rotas.	25

WELLCOME
LIBRARY

P

10680

CONSIDERATIONS ON STANDARDS OF STAFFING

A. INTRODUCTION.

In 1943 the King's Fund published recommendations on two subjects for consideration by hospitals: hospital diet and the supervision of nurses' health. The readiness with which the recommendations were received, and the interest shown in the two memoranda containing them, indicated a widespread recognition of the importance of the two subjects as factors in the efficiency of the hospital services. Both were somewhat technical subjects; they came within the purview of the King's Fund primarily through the unique opportunities given to the Fund by its system of visiting hospitals, and of receiving Visitors' Reports. By this means evidence from many sources can be considered and methods in practice at many different hospitals can be compared, in no spirit of criticism, but in order that after consultation with experts, the best practices so far attained and the most enlightened views held may be made available to all responsible for hospital administration.

The same process of considering evidence from many sources and of comparing practice has been at work in connection with another subject of importance to the efficiency and the prestige of the hospitals: the number and type of nursing staff required in relation to the number of patients and certain other factors, and the amount of work to be expected of each nurse. In this case much evidence came from the general public, and as a matter of common knowledge and experience. In particular, the Fund's work for nursing recruitment brought the subject into prominence. Conferences with head mistresses, and discussion with parents whose daughters are thinking of nursing as a career, demonstrate all too plainly that in spite of many reforms in recent years, nursing is still regarded as an over-worked calling. The head mistress of a well-known school for girls said recently that opposition to nursing as an unsatisfactory career financially seems to have died out, but that parents still regard it as a "hard life" or a narrow one for their daughters. It is interesting to note a comment in the McNair Report on the Supply, Recruitment and Training of Teachers, on the subject of the esteem in which the teaching profession is held: "Parents may highly value what a particular school or teacher has done for their children and yet discourage one of those same children from entering the profession." The same is abundantly true of hospitals and of the nursing profession, and it seems to indicate that a review of standards of staffing would be timely.

The Fund's work over many years to secure a higher standard of accommodation for nurses in the hospitals in its area has also brought the subject into prominence. Too often plans are pre-

pared for a new Nurses' Home without any systematic attempt to assess future staff requirements, and almost by the time the work is completed the accommodation is found to be inadequate, owing to a failure to forecast the increase in nursing staff required. It would be disastrous if this short-sighted policy, with its resultant overcrowding, were to be perpetuated in post-war reconstruction and development.

The subject was referred to the Sub-Committee on Nursing Staff, whose Chairman is Dr. Morley Fletcher, F.R.C.P., and who have been greatly helped by the professional advice and experience of their co-opted members, Miss H. Dey and Miss E. E. P. MacManus. The Sub-Committee considered the evidence, and reached certain conclusions. These were adopted by the King's Fund, who offer them here as suggestions for the use of hospitals wishing to review their own standards of staffing.

B. THE CASE FOR A REVIEW OF PRESENT STANDARDS OF STAFFING.

When complaints are made by the general public about either the care of hospital patients or conditions for the nursing staff, one frequently hears it added in extenuation: "of course, the hospital is terribly under-staffed." In many cases, the hospital referred to is one which considers itself relatively well-staffed. For example, a social worker who was a ward patient in a London teaching hospital which is not known to have any staffing difficulty, spoke very highly of the spirit of the nurses; she said, however, that although they were most willing, they could do very little for the patients individually, as there were so few on duty at a time and they were so much rushed. Student nurses, in particular, are generally regarded by the lay public as subject to very great pressure of work compared with that in other careers. In all occupations there is a trend towards shorter hours and increased free time, and the reputation of nursing as a career is affected by the extent to which the hospitals fall behind in this respect. Staffing which was regarded as satisfactory some years ago may be totally inadequate at the present day.

The question arises at once whether this prevailing idea of great pressure of work is really due solely to the difficulty of obtaining nurses, or whether the reason is that the staff requirements are frequently under-estimated, and that a review of the whole subject of staffing and output of work is urgently needed. To quote from a recent editorial in the *Lancet* :—

" Present standards of hospital staffing, which work everybody to capacity all the time, and meet extra claims by achieving the impossible, need revising before a nurse can report sick without uneasiness. There are hospitals where

the nurse who does not eat her breakfast is forbidden to go on duty, and the one who looks seedy on duty is sent off again forthwith. But this is the exceptional viewpoint and a difficult one to maintain when patients must be nursed on a starvation ration of staff, and by a team in which the raw student nurse counts as a unit and not as a supernumerary."

Further, if the nurses are overworked or appear to be rushed, this must react unfavourably on the patients, and may affect staff relations. It also discourages the recruitment of more nurses, as suggested above, and thus a vicious circle is set up. A large proportion of the population become hospital patients at some time or other in their lives, either in private beds or in the wards. If the patient sees the nurses working at high pressure, sometimes with a long daily span of duty, and showing signs of weariness or strain, he is not likely to encourage his daughter to enter the profession. If, however, the hospital is one in which the nurses seem happy in their work and in their staff relations, and which gives an impression of general efficiency in administration, and of well-run services such as catering, new interest in nursing as a career may be and often is aroused, and, indeed, recruits may be attracted to that particular hospital.

Too often questions of staffing are decided by financial considerations, by the amount of accommodation available for the nurses, or by difficulty in obtaining sufficient nurses. The salaries bill is looked upon as one of the heaviest items of expenditure, whereas in terms of value for money it is, perhaps, the most economical. In some hospitals the Matron has to make constant attempts to establish the case for adequate staff and she lacks the support of any generally accepted external standard of staffing to which reference can be made. She may even be commended for keeping down expenditure on the nursing staff. It follows naturally from this that in the course of time she herself may come to regard the capacity to run the hospital on the minimum of staff as a criterion of efficiency in administration.

It is important that the governing body should not be influenced overmuch by considerations of economy and that they should be made fully aware of the real requirements. There is room for a much clearer conception of the responsibility carried by the Matron in this connection. Upon her, in her professional capacity, there rests the responsibility of advising the Board on the size of the staff required to nurse the patients committed to her care. The reconciliation of this professional responsibility with the ultimate responsibility of the Board, which must of necessity have regard to financial and other considerations, is not always a simple matter; one or two comments on this may not be out of place. The Matron on her side should recognise that her professional capacity in no

way excludes the desirability of taking counsel with others associated with the management of the hospital in the process of arriving at her recommendations. Since, however, circumstances must sometimes arise when full compliance with her recommendations is not practicable, it is important that there should be a well-recognised procedure whereby her recommendations are placed formally before the Board at regular intervals, and the extent to which they are adopted duly minuted. If, for any reason, there must remain a discrepancy between the Matron's recommendations and the actual staff authorised by the Board, that fact should be duly placed on record.

The Committee have not been unmindful of the financial implications of increases in the nursing staff. It will be found that, for the most part, their recommendations relate to training schools. Their findings serve only to reaffirm the urgent necessity for the provision of exchequer grants to hospitals in respect of the national work which they undertake in the training of nurses. The Athlone Committee, the Horder Committee, and more recently the King's Fund in a memorandum on the White Paper, have all put forward recommendations to this effect. If nursing education were put on a more satisfactory financial basis, many hindrances to recruitment and many causes of wastage would be eliminated. It should be recognised that, although the basic training for all branches of nursing work must be given in hospital, the proportion of nurses who take up extra-hospital work is increasing very rapidly. The fact, therefore, that the hospitals have to train the entire nursing personnel for a National Health Service but only retain a proportion on their own staffs, would seem to constitute an additionally strong claim for educational grants.

The present abnormal shortage of hospital staff, due largely to the absence of so many in the nursing services of the Army, the Navy and the Air Force, may seem to indicate that this is no time to call for a review of standards of staffing. On the other hand, the hospitals are already considering plans for post-war reconstruction, and these must include accommodation for a nursing staff adequate for the scale of work contemplated. Reference has already been made to the disastrous policy of providing accommodation for immediate staff needs only and failing to estimate future requirements. *When a Nurses' Home is being built it is far better economy to add a floor or a wing beyond requirements for the existing staff and to let it remain unused for a time, than to be compelled to reopen building operations within a year or two.*

Further, the proposals contained in the White Paper, and the negotiations now going on in connection with financial assistance for hospitals, make it essential that plans should be formulated now and estimates made, both of the probable future demand for

nurses in hospitals of all types, and also of the increased outlay on nurses' salaries and on nurses' homes, with which hospitals will be faced. It may well be that some of the training schools will be called upon to increase their total intake of student nurses, in order to provide sufficient trained nurses for a national health service. In that case, they would need to review also their establishment of trained staff, as it would be a retrograde step to decrease the ratio of trained nurses to student nurses. Such an increase need not deprive the hospitals which are not training schools of staff, provided that full use is made of the new arrangements for a recognised training course and status for assistant nurses.*

C. SOME FACTORS TO BE TAKEN INTO ACCOUNT IN ASSESSING STAFF REQUIREMENTS.

In assessing staff requirements it is essential that certain fundamental principles inherent in hospital administration should be given the fullest consideration. These principles, which are not always recognised by committees, are so important that neglect of only two or three of them may vitiate the improvement in conditions which was intended :—

- (a) *Considerations of space*, such as the general lay-out of the hospital, the length of its corridors, and in particular the size of the wards, affect the staff requirements. The present movement for smaller wards or for cubicles calls for increased numbers of staff. For the same reason, private blocks need a higher ratio of nurses to patients.
- (b) The amount of nursing staff required is closely related to *the size of the domestic staff*. If the domestic staff is inadequate, the nursing staff have to undertake domestic duties ; their time for nursing duties is reduced accordingly and more nurses are needed. The trouble does not end here, since it has been proved that the recruitment of nurses is hampered by the impression that domestic duties form a large part of nursing work. It may be that when more domestic staff become available and there is an opportunity of training ward orderlies or other higher-grade domestic workers, some of the staffing problems may be solved by redistribution of duties as between professional and domestic staff.
- (c) *The reserve or "pool" of nurses* required to replace those on holiday or sick leave is much larger than is generally realised. Without this, when a nurse reports sick her ward or department may have to remain short-staffed. Before the war, in one teaching hospital of about

* Nurses Act, 1943.

600 beds, there was a pool of seventy nurses, the great majority of whom were absorbed daily as replacements, leaving only a few as genuine extras.

The above considerations apply to hospitals of all types, the following to training schools only :—

- (d) The increasing recognition of the *student status of the nurse in training** is a factor which needs to be taken into account fully in arranging the duties of student nurses.
- (e) Many hospitals are considering the adoption of the *block system of training*, whereby the student nurses are withdrawn from ward duties for a term of theoretical work each year. This system, which has obvious advantages from the administrative as well as the educational standpoint, calls for a substantial increase in the establishment of student nurses.
- (f) Where the block system is not in force, time must be allowed away from the wards for *study and for attendance at lectures*.
- (g) Whether there is a block system or not in the wards, *the pressure of work should not be so great that opportunities for observation and instruction are lost*. For this reason, the suggested ratio of student nurses may seem in excess of the actual needs of the wards, by present standards.
- (h) *The ratio of trained nurses to student nurses* has important bearings, both on the quality of the nursing care given and on the training of the nurses. There must be provision for adequate supervision and practical instruction. Hence staffing problems cannot be solved by the simple expedient of increasing the establishment of student nurses only, for it is essential to secure a proper ratio of trained staff. There should also be sufficient mobile trained staff (i.e., other than ward or departmental sisters) to be moved to meet emergencies or times of special pressure in particular departments. Too often the student nurses only are regarded as available for such adjustments, with the result that the balance of their normal course of training and experience is destroyed.

Finally, it is impossible to separate considerations on standards of staffing from the question of hours of duty. Reference has been made above to the trend towards shorter hours and increased free time. Full allowance must be made for this in assessing staff requirements.

The Rushcliffe Committee's recommendation on hours of work is :—

* See Report of Horder Committee (1943), Section II on Education and Training.

“We feel that nursing is a profession which does not allow of regimentation on a strict basis of hours to be worked, but the standard on which the salaries scale agreed by the Committee is based is a 96-hour fortnight, day or night, and we recommend that, as soon as conditions permit, this should be brought into national operation for the general body of nurses (except for those in supervisory positions) at a date to be determined by the Minister of Health, having regard to the availability of staff and subject always to the requirements of the service.”

Attempts to reduce hours without increasing the staff in proportion are unfortunate from the point of view of the patients and also of the nurses themselves. Increased pressure of work or a lowering of the standard of nursing care given, or both, must follow an arbitrary reduction in hours without ensuring adequate personnel.

D. CONSIDERATIONS ON THE RATIO OF WARD STAFF TO IN-PATIENTS.

The above considerations seem to call for some recommendation as to what is to be regarded as the optimum ratio of nurses to patients. This is no simple matter, and here again the arbitrary fixing of a standard leaves many problems unsolved. A ratio, as between total of nurses employed and number of in-patient beds, which is satisfactory for one hospital may be totally inadequate at another which has a larger out-patient department or busier theatres, and where many more nurses are absorbed in these and administrative duties. The Committee, therefore, have not followed the usual practice of attempting to fix an over-all ratio of nurses to patients. It seems a more useful expedient to consider the optimum ratio as between nurses engaged in ward duties only and in-patient beds. If this ratio were secured, the theatres, out-patient departments, and administrative departments might be expected to receive equally generous treatment. A separate standard might be adopted for the out-patient and casualty departments, based on a combination of such factors as the weekly average of out-patients and the number of clinics held.

As a basis for discussion, particulars were obtained of the authorised establishment of nursing staff at six hospitals of different sizes, all of which are training schools. It should be emphasised that these are all general hospitals undertaking acute work and that the Committee fully realised that the conclusions reached would not apply to hospitals of other categories without considerable modification. Indeed, for some types of work it might be necessary to repeat the whole process of obtaining data on existing staff and calculating from this in order to reach an optimum standard.

In each case the number of day and night staff actually engaged in ward duties (including the "pool" for holidays, replacements and extras) was ascertained. The night superintendent and night sisters were included, as carrying in some measure the same responsibilities for the patients' care as the ward sisters, but none of the day administrative staff. The ratio of ward nurses per hundred beds was then calculated, and was found to be as follows :—

TABLE I. WARD STAFF PER HUNDRED BEDS

	<i>Sisters</i>	<i>Trained Staff Nurses</i>	<i>Student Nurses</i>	<i>Total</i>
Hospital A (Over 700 beds)	4.66	1.75	*45.92	52.33
Hospital B (Over 600 beds)	4.26	3.90	*45.39	53.55
Hospital C (Over 400 beds)	4.41	—	*38.97	43.38
Hospital D (Over 200 beds)	4.39	4.39	*29.67	38.45
Hospital E (145 beds)	6.52	6.52	34.06	47.10
Hospital F (112 beds)	4.63	3.70	34.26	42.59

N.B.—At Hospital C it was stated that permanent ward orderlies were employed, without whom it would have been necessary to increase the establishment of student nurses.

It cannot be emphasised too much that a rigid standard per hundred beds should not be imposed regardless either of the size of the wards or of the type of case to be nursed. Normally ward units should not be of more than twenty-five beds and the ideal may be less than this. Larger wards have disadvantages from the point of view of the patients, and also make heavy demands on the sister in charge, no matter how many staff nurses she has. Assuming that each hundred beds are divided between four ward units of twenty-five beds, it will be seen that the ratio allows for more than one sister per ward. It is intended, of course, that there should be only one sister in charge of each ward. The reason for a higher ratio is that the night sisters are counted in the total establishment of sisters engaged in ward duties, and also the holiday or relief sisters appointed for ward duties at some hospitals.

The next step was to form an estimate of the increase in staff which would be needed at these hospitals if the 96-hour fortnight

* Including fourth-year student nurses.

were in force. This was done purely by calculation from the hours worked under the present arrangements,* which were found to vary between 95 per fortnight and 132 per fortnight. It is recognised that in practice the increase in staff would not always be exactly in inverse ratio to the decrease in hours. Such a calculation, however, seemed the best practical means of giving uniformity to the data under consideration. The result was as follows :—

TABLE II. WARD STAFF PER HUNDRED BEDS,
CALCULATED ON BASIS OF 96-HOUR FORTNIGHT.

		<i>Sisters</i>	<i>Staff Nurses</i>	<i>Student Nurses</i>	<i>Total</i>
Hospital A		5.05	1.89	†49.75	56.69
Hospital B		5.68	4.51	†55.32	65.51
Hospital C		4.41	—	†41.10	45.51
Hospital E		6.52	7.88	41.51	55.91
Hospital F		4.63	3.70	39.81	48.14

(Hospital D is omitted from the above statement as information on hours actually worked was not available.)

It will be seen that the highest ratio is 65 nurses to 100 beds and that there is considerable variation between one hospital and another. Even at the hospitals with the highest ratio there did not appear to be full provision for all the factors mentioned above. It seems clear, therefore, that at hospitals with a relatively low ratio there must be undue pressure of work or some reduction in the nursing care provided for the patients. It has been well said that “time is one of the essential conditions of good medical work and time is a problem of numbers.” The same principle may be applied to nursing work. All ranks of the nursing profession maintain the tradition to compensate for any deficiency in staffing by increased effort. The Committee are satisfied, however, that if full weight is to be given to the various factors already mentioned and if full recognition is to be given to the student status of the nurse in training, some moderate increase upon the foregoing figures is inevitable. Their suggested ratio, based on the above data and offered for consideration by the hospitals in the light of their individual requirements, is not less than 70 ward nurses to 100 in-patient beds, the total being made up as follows :—

* Except in the case of Hospital F, where the increase in staff necessary to introduce a 96-hour fortnight had already been worked out in detail.

† Including fourth-year student nurses.

TABLE III. SUGGESTED RATIO OF WARD STAFF
TO ONE HUNDRED BEDS

				1st to	
		<i>Trained</i>	<i>4th year</i>	<i>3rd year</i>	<i>Total</i>
		<i>Staff</i>	<i>Student</i>	<i>Student</i>	<i>Nursing</i>
		<i>Nurses</i>	<i>Nurses</i>	<i>Nurses</i>	<i>Staff</i>
Staff	<i>Sisters</i>				
per 100 beds	5	5	10	50	70

N.B.—This is intended for general hospitals undertaking acute work, where the 96-hour fortnight is in force. It does not allow for the block system of training, nor should the students in the preliminary training school be included in the total of student nurses.

It is important that certain considerations should be closely associated with this suggested ratio :—

1. *Interchangeability of Categories.*

Some difficulty arises from the interchangeability of the various categories. For instance, at some hospitals giving a four-year training, the fourth-year student nurses are employed entirely as staff nurses and indeed take their place (see Hospital C, Table I). At others, they are still regarded as student nurses since their training course has not been completed. Other hospitals give a three-year training course, and have no fourth-year student nurses.

While not questioning the principle that a staff nurse should always be a State registered nurse, or advocating any shortening of the four-year training course, the Committee have found it necessary, in assessing for hospitals giving varying lengths of training, to preserve uniformity by including in the student nurse category only those in the first to third years of training.

Again, at some hospitals the establishment of sisters is kept to the minimum, and the staff nurses always deputise for them. At others, there are "holiday" sisters and other extra sisters for replacements. The first three figures given in Table III may be modified, therefore, according to the practice of the hospital, provided that the total of the three columns is not reduced. For instance, in a hospital giving a three-year training, and therefore without fourth-year student nurses, the establishment of trained staff nurses per hundred beds should be increased by ten, i.e., the number of the fourth-year student nurses given above. Again, the numbers for sisters and staff nurses may be increased or decreased, provided the total remains not less than ten per hundred beds.

In practice, it is not satisfactory that more than one sister should have responsibility for a ward, and therefore the appointment of supplementary ward sisters cannot be recommended as

a means of ensuring shorter hours for sisters. There should, however, be ample provision of trained staff nurses to deputise for the sister so that she need not remain long hours on duty when the ward is exceptionally busy. Here, in particular, the size of the ward must be a determining factor in assessing staff per 100 beds.

2. *Ratio of Trained Nurses to Student Nurses.*

The figures suggested give a ratio of one trained to 2.5 student nurses (if fourth-year student nurses are reckoned for this purpose as trained nurses). It is not suggested that this is the optimum ratio of trained staff to student nurses, but it is substantially better than the existing ratio and probably as much as could be secured for some years to come, on the numbers of trained nurses available, if the intake of student nurses is to be maintained.

There are two schools of thought on the question of the best ratio of trained nurses to student nurses. As an instance in support of the case for a high ratio of trained nurses, the University School of Nursing in Brussels may be quoted. Here in 1938 it was the special pride of the school that as their ratio was no less than 2.5 trained nurses to one student nurse, no student nurse was ever moved from the ward or department in which she should be working according to her curriculum to meet an emergency in any other department. Trained staff were always moved for replacements. Thus the student nurses received a balanced training without any gaps in the syllabus. Such an arrangement should eliminate a frequent cause of complaint in this country: that nurses who have taken some special training before general training are kept far too long in that particular branch of work in their general hospital, because they are most useful there. For instance a State registered sick children's nurse who entered a teaching hospital for a three-year general training spent at least ten months of it in the children's wards where, of course, she was capable of acting as staff nurse; this must have impoverished her general training and experience.

The other school of thought maintains that the student nurses benefit if they are given the responsibility and the skilled work which would be undertaken by the trained staff if there were sufficient.

It would seem that ultimately the interests of the patient would be served best by providing sufficient trained staff to ensure that the student nurses' course is not sacrificed to the needs of the hospital, and to allow student nurses in their last year of training to undertake the more skilled and advanced nursing duties and responsibilities under adequate supervision.

3. *The Block System.*

It is possible that within the next few years many more hospitals will adopt the block system of training. The total withdrawal from ward duties of all the student nurses during the course of the year for periods of theoretical work means that the establishment of student nurses must be increased in proportion, if the ratio of nurses engaged in ward duties is to remain the same. It is intended, of course, that student nurses engaged in ward duties should still have time for study and tutorials. No increase in the total of trained nurses is required. The resultant lowering of the ratio of trained nurses to student nurses is apparent rather than real, since the supplementary number of student nurses are away in the school and not in the wards, and the ratio remains the same as regards staff actually engaged in ward duties.

It is estimated that to allow for the block system an increase of one-fifth should be added to the recommended number of first- to third year student nurses, as shown in Table III. This would give the following figures :—

TABLE IV. SUGGESTED RATIO OF WARD STAFF TO ONE HUNDRED BEDS WHERE THE BLOCK SYSTEM IS IN FORCE

Staff per 100 beds	Sisters	<i>Trained</i>	<i>4th year</i>	<i>1st to</i> <i>3rd year</i>	<i>Total</i>
		<i>Staff</i> <i>Nurses</i>	<i>Student</i> <i>Nurses</i>	<i>Student</i> <i>Nurses</i>	<i>Nursing</i> <i>Staff</i>
	5	5	10	60	80

Hospitals which are not Training Schools.

Hospitals which are not training schools have their own staffing problems, which must not be left out of consideration. The total number of such hospitals may be larger in the future, since the policy of the General Nursing Council is to increase the minimum requirement of occupied beds if a hospital is to be approved as a training school for nurses. Some may group themselves with larger hospitals for training purposes and receive a succession of student nurses from the parent hospital. In others, there is hope that the arrangement of a recognised course of training for assistant nurses who will work under the supervision of trained nurses may go a long way towards the solution of the staffing problem. The Committee have not recommended a ratio of ward staff to beds for these hospitals, as it seemed well to wait until there was more assurance as to the extent to which assistant nurses would be trained for work in general hospitals, and not only to nurse the chronic sick and the tuberculous. While adhering to the principle that no assistant nurse should be employed where

student nurses are being trained, the Committee consider that there is an important place for well-trained assistant nurses in the smaller general hospitals which are not training schools. Their services would remove the need for the employment of under-age candidates as so-called probationers. Further, the recruitment of assistant nurses of good type would be encouraged greatly if there were prospects of work in general hospitals for them as well as in institutions for the chronic sick and the tuberculous.

E. RELATIONSHIP BETWEEN NUMBERS OF WARD STAFF AND OTHER NURSING STAFF.

It will be remembered that the Committee deprecated the practice of calculating an overall ratio as between the total nursing staff and the number of in-patient beds, owing to the wide variation in the staff demands for out-patient departments, operating theatres, etc. The requirements for these must be assessed separately according to the amount and type of work for which each department is responsible. At the same time it might be of interest to know the average relationship between numbers of ward staff and numbers of nurses engaged in other duties.

An examination was therefore made of the numbers of nursing staff engaged in administrative and departmental duties (theatres, out-patients, special departments, etc.) at the same group of hospitals. Staff for private blocks have not been included in the calculation of ward staff or other staff. It was found that the total of nurses engaged in other duties varied between 19 per cent. and 38 per cent. of the number engaged in ward duties, the proportion being markedly higher in the smaller hospitals. The ratio recommended for the wards* is 70 nurses to 100 in-patient beds, not allowing for the block system. An addition of 38 per cent. for administrative and departmental staff would give 96.6 total nursing staff to 100 beds. This leads to the conclusion that some general hospitals with out-patient and other departments may in the future have to plan for a total nursing staff approximating to one nurse per in-patient bed, plus the preliminary training school. In special hospitals, for which no recommendations have been made here, the requirement may be even greater in some cases.

The Committee would reiterate that it is highly undesirable to work by an arbitrary ratio regardless of the many factors which may call for a modification of that ratio. They hope, however, that their suggestions may serve as a stimulus to fresh consideration of staff requirements and also as some guide to the amount of accommodation for nursing staff required in plans for post-war reconstruction.

* See Table III.

F. IS ANY USEFUL PURPOSE SERVED BY AIMING AT AN OPTIMUM RATIO IN THE PRESENT CIRCUMSTANCES?

The Committee know well that, apart from a few favoured exceptions, it is impracticable in the present wartime circumstances for hospitals to attain the ratio recommended. Moreover, it will not be rendered practicable in all hospitals by a return to peacetime conditions and by the demobilisation of the nursing services of the Armed Forces. Many nurses who have served in civil hospitals during the war will be retiring, or, at any rate, leaving hospital service. Others will probably want to take post-graduate courses, such as the year's course for sister tutors. The rapid development of the preventive services may also call many away from hospital posts.

The question will inevitably be asked: would it be preferable to concentrate on bringing up to an agreed minimum standard those hospitals where the need is at present most acute, rather than to encourage those which are relatively well-staffed to make increased demands on the "pool" of available nurses? There is no doubt that at times problems of distribution can become sufficiently urgent to justify and even to demand some steps in the direction of levelling out the supply available. The immediate present, with the need to provide for the nursing care of battle casualties on an unknown scale, would seem to be such a time. It would be unfortunate, however, if the immediate emergency were allowed to crowd out more far-reaching issues, in nursing any more than in other spheres of national life.

There is an important consideration here: the problem of the supply of nurses is ultimately much more one of recruitment than of distribution. The two problems call for different treatment. Paradoxical as it may seem, steps to solve the problem of distribution may often have a deleterious effect on recruitment. If, for instance, nurses were directed into, or required to remain in, an unpopular branch of nursing work (other than as a wartime emergency measure), recruitment to the profession would suffer immediately. Similarly, if the standards of staffing in all hospitals were brought down to a uniform level, the more fortunate and sought-after training schools would lose some of their appeal. The recruitment value of a hospital where conditions are good, and where there is a surplus of applicants, extends far beyond its own requirements. Many girls are attracted by the idea of nursing in some particular well-known hospital, and if they are not among those selected for it they may often be persuaded to apply elsewhere. It is most important, therefore, that those hospitals which can offer optimum standards and conditions once the immediate emergency is past, should consider their requirements

now, and if necessary authorise a revised establishment of nursing staff. By doing so they will eventually assist other hospitals rather than deprive them of staff.

The problem of recruitment is not to be solved by such superficial means as special recruitment campaigns, posters, exhibitions, etc. Transitory efforts of this nature may stimulate interest temporarily, and even bring large numbers of enquiries, but they do not result in a good proportion of suitable recruits. Still less can they be said to enhance the reputation of nursing as a professional career. Indeed, they may have a harmful effect on it, owing to the difficulty of avoiding false values. Much more can be done by tackling the deterrents to recruitment (whether founded in fact or due to misconceptions) and by reducing the causes of wastage. The wastage rate during training is deplorably high—the Horder Committee places it at no less than 48 per cent. As a result, the total number of entrants required annually for the general training schools throughout the country (including, of course, both voluntary and local authority hospitals) if the necessary “output” of newly-qualified nurses is to be achieved, reaches a startling figure. Surveys of the number of training places, the numbers entering for and passing the preliminary and final State examinations, and the requirement of trained nurses, indicate that 20,000 is a conservative estimate of the number of recruits needed annually, without allowing for the higher standards of staffing recommended in this memorandum. This represents nearly 50 per cent. of the number leaving the girls’ secondary schools each year at any age. The importance of recruiting older candidates from other occupations and in particular of reaping the harvest of demobilisation from other forms of national service should be borne in mind. Even so, it cannot be expected that more than a proportion of the intake required will be recruited from the secondary schools. The most practical policy, therefore, is to aim at reducing preventable wastage very substantially and at removing present deterrents to recruitment.

The whole subject of supply and demand, recruitment and distribution, is highly complex and the Committee realise that only a few aspects are touched on here. They are convinced, however, that shortage of staff and resultant pressure of work should be placed high among the deterrents to recruitment and the causes of wastage. As suggested above, they have no hesitation in recommending that *those hospitals which can staff on adequate lines should not under-estimate their requirement of nursing staff, but should set a standard of conditions of work and of nursing care which will enhance the reputation of nursing as a career and will assist recruitment to the profession as a whole.* This should ultimately ease the problem of staffing those hospitals which are less fortunate.

G. HOURS OF DUTY.

Reference has been made to the trend towards shorter hours and to the intimate connection between hours of duty and number of staff needed. No attempt has been made here to formulate recommendations as to the best arrangement of hours of duty. Hospitals wishing to put the 96-hour fortnight into operation will, no doubt, consider various arrangements and adopt or modify those which seem best suited to their circumstances. Much confusion arises, however, from the wide variation in the methods of calculating hours of duty. Some of these methods are scarcely equitable, and in view of the general uncertainty on the point it seemed well to draw up recommendations which might lead to greater uniformity in the assessment of hours of duty. These are printed in the appendix.

Span of Duty.

The span of duty is a frequent subject for criticism by the outside public, perhaps almost as much so as the actual hours of duty worked. Under the present arrangements it is difficult to arrange for adequate care of the patients at the "peak" periods of work without a fairly long span of duty. This is tiring for young nurses and is not entirely compensated by giving a longer period off duty during the day. Attempts have been made to shorten hours by giving several days off or nights off per fortnight with longer hours of duty on other days. Here again there are disadvantages. One that is frequently mentioned is that the nurse's work and experience lack continuity and she is unable to follow the cases in her ward through the various stages of illness or recovery. An eight-hour shift system which avoids the long span of duty has been given little attention in this country, perhaps because it presents obvious difficulties in the case of ward sisters. With a more generous allowance of trained staff there is room at least for some modification of the shift system and experiments in this direction are to be encouraged whenever sufficient staff is available.

Fixed Off-duty Time.

Whatever system is adopted it cannot be emphasised too often that if hours of duty for the nurses in each ward and department were allocated in advance so that each nurse knew when to expect her off-duty time, a frequent subject of criticism would be removed. It stands to reason that changes in hours of duty may have to be made in emergencies, particularly if the "pool" of nurses is inadequate, but there are still complaints that nurses are told their off-duty times from day to day and find great difficulty in arranging to meet their friends. It is important that a permanent rota of duty be drawn up for each ward or

department and posted in a prominent place where all the nurses working in that ward or department can see it, and know their off-duty time as long as they remain in that position.* A copy should be filed in the Matron's office, and if any changes are necessary they should be made through the Matron's office only. This recommendation may be thought difficult to implement but the Committee have received evidence that such a method has been practised successfully for many years. Where difficulties arise it is fair to assume that the normal complement of staff is inadequate to meet emergencies or additional claims. A reform in this direction would undoubtedly help to dispel the objection often advanced by parents, that those who take up nursing must be prepared for a narrow and restricted life. Such an objection cannot arise from the nature of the work, which offers unfailing satisfaction and interest, and it is regrettable that conditions should be such as to justify it anywhere.

H. ACCOMMODATION FOR NURSES.

Reference has been made several times to the importance of nurses' accommodation in plans for post-war reconstruction. While not attempting a detailed survey of this large subject, the Committee have thought it well to suggest a few considerations, based mainly on the Fund's long experience in considering schemes for nurses' homes and for extensions.

The necessity of estimating on a generous scale to meet future staff requirements has been emphasised. It is deplorable that increases in staff should ever be delayed by shortage of accommodation, but there is no doubt that this often happens. Beyond this, the scale of accommodation should be sufficiently generous to obviate certain drawbacks frequently accepted as inevitable, even in recently built homes in pre-war days. One is that the number of bedrooms is so much less than the total establishment of nursing staff that there has to be a constant change-over of rooms between those going on leave and those returning. Nurses going for only a week's holiday have to pack up their possessions and relinquish their rooms, to unpack in new quarters on their return. Similarly, a nurse going on sick leave for a few days may lose her room and find her possessions removed to a store-room. Some greater degree of permanence in tenure of a room would be a welcome amenity and would also help to simplify the home sister's domestic problems.

Certain recommendations on the accommodation in nurses' homes made in the Fund's Memorandum on the Supervision of Nurses' Health (1943), may be repeated here :

* See Appendix, Chart 3.

“ It is desirable that each nurse should have a room to herself, with a floor area of at least 100 sq. ft. Present circumstances may render this impracticable in some cases, but in view of the increase in epidemics among nurses during the war, due to overcrowding in dormitories, every effort should be made to provide adequate space and, what is still more important, effective cross-ventilation.

“ Quarters for the night staff should be arranged in such a way that they are free from noise during their sleeping hours.

“ Baths and lavatories should be provided in the ratio of one to five or six nurses ; and nurses should be able to have hot baths daily, notwithstanding the present need to economise in fuel consumption.

“ It is preferable that there should be a wash-basin in each room ; but where it is found necessary to set up a range of wash-basins in a toilet room, these should be properly spaced and curtained, with a slab to take toilet requisites.

“ Shampoo rooms and rooms where nurses may launder and iron small articles should be provided.”

It is too often assumed that the nurses' home comprises all the accommodation needed for nurses. At least as careful attention should be devoted to their teaching department and to the provision of sufficient lecture rooms and other rooms, both for study and for practical work. Rooms for demonstrations and practices of nursing treatments should be of considerable size and should reproduce the conditions of work in the wards as nearly as possible. The provision of adequate heating, ventilation and lighting is at least as important in the teaching department as in the living quarters, if full benefit is to be obtained from the teaching facilities provided.

It is probable that after the war many more hospitals will allow their trained staff opportunities of living away from the hospital, and that there will be an increased demand for such opportunities as living conditions become easier. There is much to be said on both sides of this question ; the advantages are mainly psychological, since the sister living alone or sharing a flat with one or two others cannot have, on the Rushcliffe allowance for non-residence, the same standard of physical comfort and convenience as that provided by the hospital for its staff. It is generally agreed that the training course should always be a resident one and that some of the trained staff also must be resident. The principle of non-residence should not be adopted permanently as an expedient to overcome shortage of accommodation in the nurses' home. According to the Rushcliffe recommendations, only the nurse who lives out by her own wish and by permission of the

hospital receives a cash allowance in lieu of emoluments. It would be unfortunate for hospitals to deny their trained staff the opportunity of living out if the demand for this became general, but no general ruling can be made ; the problem must vary according to the environs of the hospital and the possibility of finding suitable accommodation in the neighbourhood.

CONCLUSIONS.

In spite of many improvements, hospital nursing is still regarded as an over-worked and under-staffed calling. This impression may be due in part to misconceptions, but it is widely held by the general public, from whom the nurses of the future must be recruited, and by hospital patients who often advance it as an explanation of inadequate nursing care.

The present circumstances are not propitious for increasing staff, but nevertheless there are strong reasons for suggesting that a review of standards of staffing is so overdue that it should be made a matter of urgency :

(1) Recruitment is affected by the prevalent impression of under-staffing and over-work.

(2) Shortage of staff must have a harmful effect on the standards of nursing care and on the nurses' welfare.

(3) A long-standing tradition of keeping down expenditure on salaries has set up a false criterion of efficiency in administration, and has hindered the application to nursing of principles of staff management and output of work now generally accepted in other occupations.

(4) In planning for post-war reconstruction there is a danger of under-estimating very seriously the amount of accommodation needed for nursing staff, if the requirements are assessed on current practice.

(5) The 96-hour fortnight will be made a national requirement (under the Rushcliffe scale) as soon as conditions permit. Here again the nursing suffers if hours are reduced arbitrarily without corresponding increase in staff.

In assessing staff requirements, due allowance must always be made for the following factors* :—

(a) General lay-out and span of hospital, size of wards, number of cubicles (which demand a higher ratio of nurses to beds).

(b) Claims of out-patient departments, theatres, and other special departments, which vary widely as between one hospital and another.

* As these factors do not lend themselves to condensation, readers are asked to refer to Section C.

(c) Adequacy of domestic staff and possibility (when the present emergency is past) of employing higher-grade domestic workers such as permanent ward orderlies to give the professional staff more time for actual bedside nursing.

(d) Adequacy of reserve or "pool" of nurses to replace those on holiday or sick leave. This should be much larger than is generally realised and reform in this direction would remove many difficulties and causes of criticism.

(e) In training schools, if the nurse in training is to have her due student status, she should not be regarded as a full unit of labour, but should be allowed much more time for attendance at lectures, for study and for observation and instruction in the wards.

(f) If the block system of training is adopted, a substantial increase in the number of student nurses is needed.

(g) The adequacy of the ratio of trained nurses to student nurses has important bearings on the quality of the nursing care given and on the training of the nurses.

(h) Every decrease in hours should be accompanied by at least a corresponding increase in allowance of staff, otherwise the pressure of work is only aggravated.

The following method is suggested to hospitals wishing to review their standards of staffing :—

(i) Consider in the first place the normal establishment of sisters and nurses engaged in ward duties only and calculate the ratio of these to 100 in-patient beds. (The reason for avoiding an over-all ratio of all nursing staff to patients is the great variation as between one hospital and another in the claims for special departments and administrative staff.)*

(ii) If the 96-hour fortnight is not in force, work out the amount of additional staff required for this and assess the ratio from the new figures.

(iii) Allowing for the factors mentioned above, estimate the optimum requirement of each category of nurses if pressure of work is to be avoided and ordinary emergencies met without strain. A suggested ratio for general hospitals only is given in Table III, page 12, but the Committee would emphasise that it is most undesirable to adopt an arbitrary ratio without consideration of the many modifying factors in each case.

* For purposes of comparison the ratio in six hospitals of different sizes is given in Table I, page 10. Hospitals wishing to assess their present ratio on the same basis can obtain fuller particulars of the method used from the offices of the King's Fund.

(iv) If it is intended to adopt the block system, an increase of approximately one-fifth of the recommended establishment of first-third year student nurses should be made.

(v) Assess the requirements for each special department separately, but on the same basis of eliminating undue pressure of work and allowing for a 96-hour fortnight.

(vi) Assess the cost of increases in the establishment of nursing staff, and associate with this the following considerations :

There has been a time-lag in adjusting to modern conditions of work. For many years the expenditure on the salaries of the nursing staff has perhaps been more economical in terms of value for money than the expenditure in any other department of the hospitals' work. This fact has affected the prestige of the hospitals to some extent and has opened the way for unfortunate criticism in the press.

Expenditure on reforms which achieve better training for nurses should not be regarded as an obstacle, but rather as strengthening the case for exchequer grants to hospitals in respect of the national work which they undertake in the training of nurses.

(vii) Decide the extent to which the agreed optimum establishment could be authorised now if sufficient nurses were to be had. The Matron should be given a free hand to recruit or engage up to this amount. Arrange for the staff question to be reviewed at regular intervals and the ratio re-assessed on the current bed complement until such time as the optimum ratio is attained.

Hours of Duty.

Owing to the wide variation in practice, the Committee recommend that there should be some uniform method of calculating hours of duty. Their suggestions for this are set out in the Appendix, but they have not attempted recommendations on the best arrangement of hours of duty. They would point out, however, that the long daily span is a frequent subject of criticism and that there is still room for trying out modifications of the 8-hour shift system.

Fixed Off-duty Times.

The Committee recommend that a rota should be drawn up for each ward or department at least a month ahead. It should be posted where it can be seen by all the nurses working in that department ; a copy should be filed in the Matron's office and any necessary changes made through the Matron's office only.

Accommodation for nurses.

Suggestions are made whereby certain drawbacks frequently found in accommodation for nurses may be avoided :

The number of bedrooms should bear such a relation to the total establishment of nursing staff (not to the number of nurses actually on duty) that it is not necessary to have a constant change-over of rooms between those going on short leave and those returning. There should also be a margin to allow of temporary additions to the staff.

In normal times every nurse should have a room to herself, with a floor area of at least 100 sq. feet.

The quarters for the night staff should be free from noise during hours of sleep.

Baths and lavatories should be provided in a ratio of one to five or six nurses. There should be an ample supply of hot water. It is preferable that there should be a wash-basin in each room. Failing this, there should be a range of wash-basins properly spaced and curtained in a toilet room.

Shampoo rooms and rooms where nurses may launder and iron small articles should be provided.

At least as much careful attention should be devoted to the accommodation in the teaching department as to that in the nurses' home. It is important that there should be ample space and adequate heating, ventilation and lighting, if full benefit is to be obtained from the teaching facilities provided.

It is probable that after the war many more hospitals will allow their trained staff opportunities of living away from the hospital. The training course should always be a resident one. A difficulty in assessing the amount of accommodation required in the future arises from the fact that the demand for non-residence is likely to vary from time to time in accordance with variations in living conditions. This fact needs to be borne in mind in planning accommodation for nurses.

It will be clear from the foregoing that there has been no intention of drawing up a rigid code of recommendations for adoption by hospitals. The King's Fund offer these suggestions for consideration by the hospitals, in the light of their own needs, circumstances and resources. The increased efficiency of the services offered by the hospitals to their patients, no less than the welfare of the nursing staff, has been the aim throughout.

APPENDIX.

METHODS OF CALCULATING HOURS OF DUTY.

The Report of the *Lancet* Commission on Nursing (1932) contained the following passage :—

“ Many hospital Matrons think of weekly hours of duty as spread over a fortnight, or even over four weeks. If a nurse gets a free day (twelve hours) a fortnight, six hours are often subtracted in stating her hours of weekly duty.

“ Similarly, average daily hours on duty are usually calculated on the basis of a seven-day week, all meals being classed as off-duty times. The curious results of this way of expressing average daily hours, if applied to a secretary who is free half Saturday and all Sunday, would be to regard her working day as under six hours, whereas it is usually reckoned as seven.

“ Although one-and-a-half hours for meals during working hours are usually regarded as *off-duty*, attendance at midday dinner is mostly compulsory and early lunch is sometimes served in the ward kitchen, when the nurse is not allowed to leave the ward (a restriction which applies in many hospitals to the meals of the night nurse).

“ We have ascertained that two hours' off-duty time per day usually indicates two hours net, without inclusion of a meal time ; three hours' off-duty time usually, and four hours' off-duty time invariably, includes half an hour for one meal though if the meal be early lunch or tea attendance may not be compulsory.

“ The same variability is found with reference to lectures, attendance at which is at some centres counted as time on-duty and at others as time off-duty. The difficulty of assessing the nurse's total leisure is increased by the fact that only in a few hospitals is she free to go out after working hours for example, from 8 to 10 p.m., without obtaining special permission.”

Some progress has been made since the above was written. It needs to be remembered still, however, that the 96-hour fortnight gives the equivalent of an eight-hour day only on the basis of six full working days a week, not five and a half or five, as in many other occupations.

At present, a nurse's time is in effect divided into several different categories.*

(a) Time on duty in the wards and time spent at lectures.

* See Appendix, Chart 2.

- (b) Time when the nurse is not on duty but is required to be within the hospital precincts, e.g., meal times, sleeping time, time after going off duty in the evening if the nurse is not free to go out. Nurses should, however, be free to go out up to a stated time if they go off duty at a reasonable hour.
- (c) Time off-duty, in which the nurse should be entirely free. At present, however, this is generally expected to include time for studying and writing exercises.

It is recommended that the assessment of hours of duty should be based solely on category (a), i.e., actual hours worked, and not on calculations from the amount of off-duty allowed in the fortnight. After much consideration of current variations in practice with regard to meal times the Committee reached the following conclusion :—

Breakfast. This is normally taken before going on duty and does not affect the reckoning of hours.

Mid-morning lunch. No deduction from hours of duty should be made for this short break, which is a time for the nurse to remove the traces of the morning's work, change her apron and possibly attend to her room, rather than a meal time.

Dinner and tea. The time for these should not count as part either of time on duty or of off-duty time. If they occur during spells of duty the appropriate deduction may be made, if they come during or at the end of time off-duty the equivalent amount of time should be added, so as to give the full two-hour or three-hour off-duty period, exclusive of meal times.

Supper. This generally comes outside a spell of duty, but if it occurs during hours of duty the appropriate deduction may be made as for dinner and tea.

To give an example :—

Assessment of hours of a nurse who goes on duty at 7 a.m. and goes off duty at 8 p.m.

If her off-duty time is 9 a.m. to 12 noon, dinner 12 noon to 12.30 p.m., $\frac{1}{2}$ -hour for tea, supper after going off duty, her working day is 9 hours, made up as follows :—

7 a.m. to 9 a.m.		=	2 hours	
12.30 p.m. to 8 p.m.				
(less $\frac{1}{2}$ -hour for tea)		=	7 hours	
Total hours of duty		=	9 hours	Span of duty = <u>13 hours</u>

Hospital

...Ward

1st WEEK.

2nd WEEK.

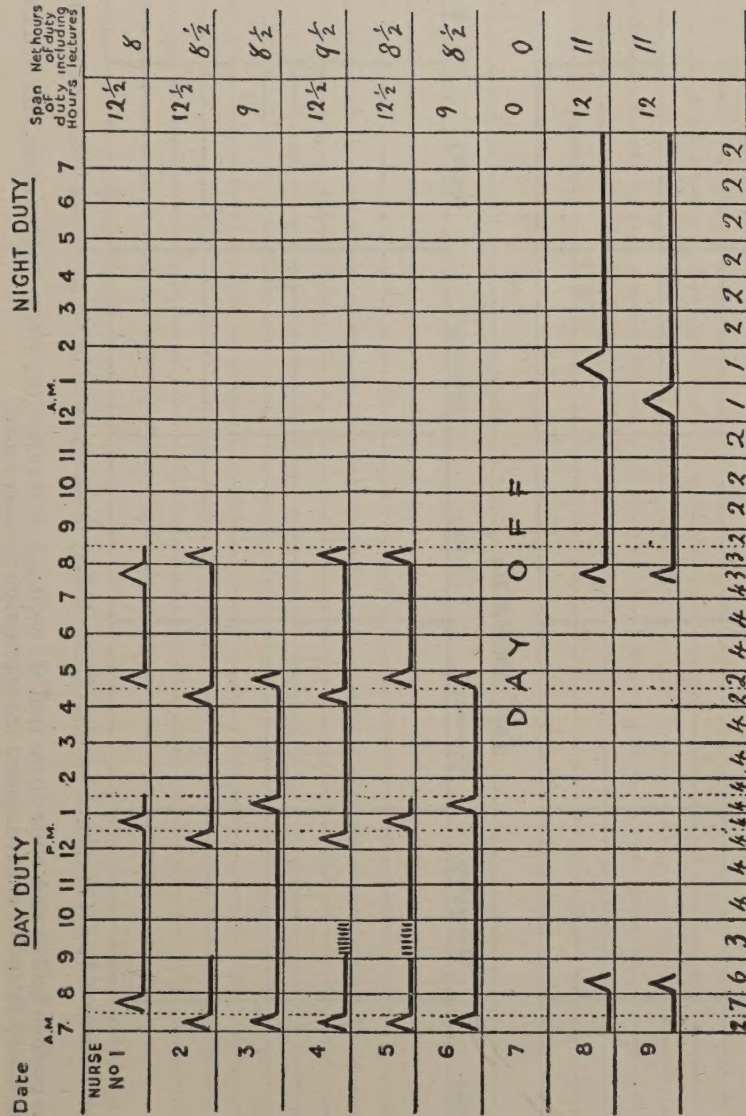
3rd WEEK.

4th WEEK.

As the rota does not go by the calendar month, but by a 4-week cycle, it would be necessary to fix the week, e.g., by a note "Admission week" against the first week, or by whatever term is in use at the hospital.

CHART 1

ONE-DAY CHART FOR STAFF OF ONE WARD



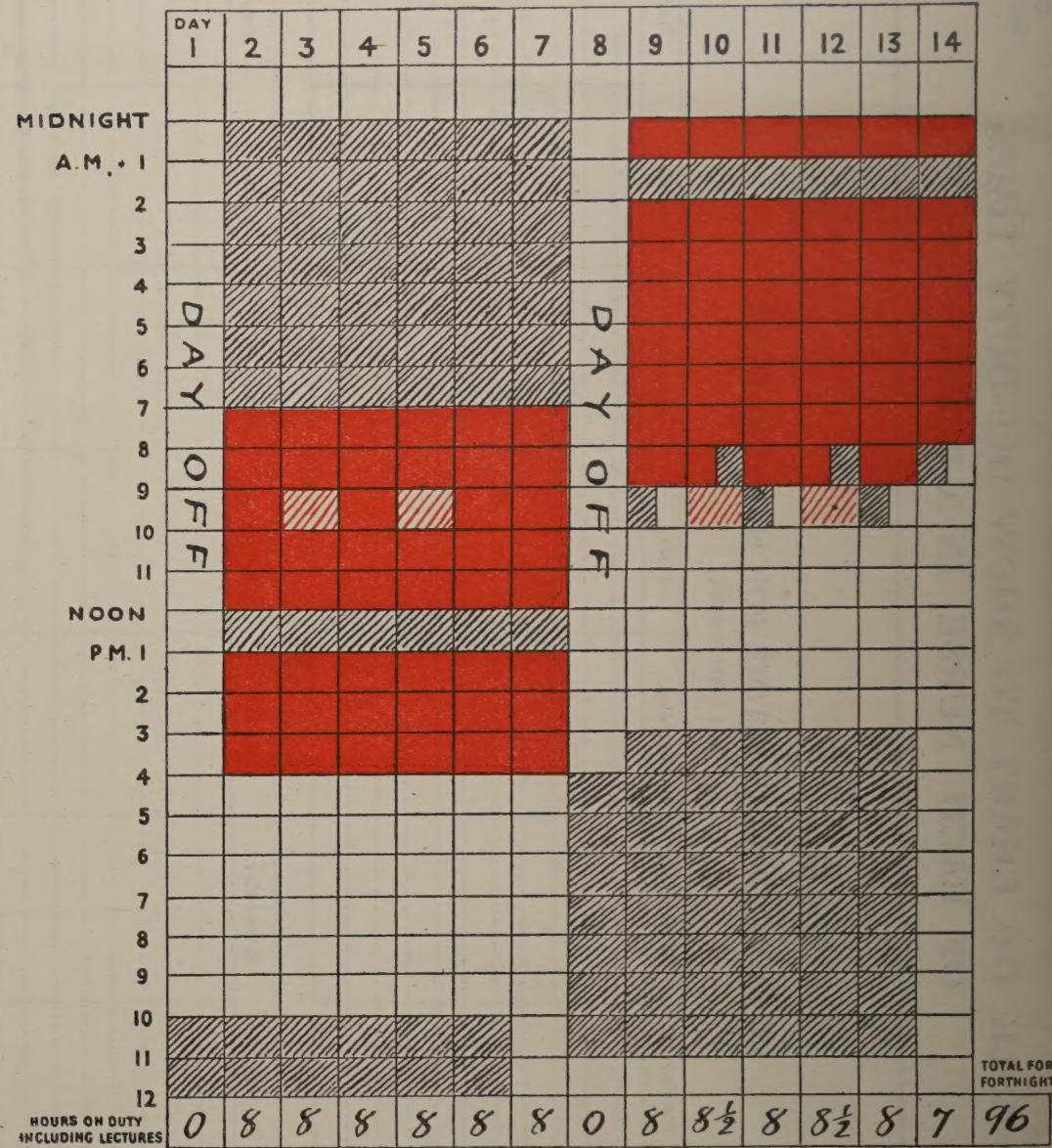
No. of nurses on duty at any hour

NOTE: This specimen form is of use in planning the arrangement of duty hours, as it shows the number of nurses actually on duty in the ward at any hour of the day or night, and also the span of duty for each nurse, as well as the net hours worked (see p. 18).

..... ON DUTY
..... AT LECTURES
..... AWAY FROM DUTY FOR MEAL

It is not suggested that the hours plotted above represent an ideal arrangement of hours of duty; they are intended only to illustrate the use of the chart.
It is assumed that there would be a relief for two hours during the night, so that one nurse would not be left alone in the ward.
This is not shown, as the relief does not form part of the permanent ward staff.

EXAMPLE OF CHART FOR ASSESSING A NURSE'S HOURS OF DUTY



On duty in wards.
On duty at lectures and examinations.
Off duty, i.e., allowed to go out.
Not on duty, but required to be within the hospital precincts (certain meals, sleeping time, etc.).

NOTE: It is not suggested that the hours plotted above represent an ideal arrangement of hours of duty; they are intended only to illustrate the use of the chart.

Published 1943 :

MEMORANDUM ON THE SUPERVISION OF NURSES' HEALTH
(price 3d., post free).

MEMORANDUM ON HOSPITAL DIET (price 6d., post free).

Published 1945 :

SECOND MEMORANDUM ON HOSPITAL DIET (price 9d., post free).

For consideration by hospitals.

Obtainable from Messrs. Geo. Barber & Son, Ltd.,
Furnival Street, London, E.C.4.

